



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,182	06/19/2001	Octavian Anton	P66717US0	8968

136 7590 12/03/2002

JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 12/03/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/857,182	ANTON ET AL.	
	Examiner	Art Unit	
	Patricia L. Nordmeyer	1772	

-- Th MAILING DATE of this communication app ars on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 112 rejection of claim 11 of record in Paper #10, Pages 2 – 3, Paragraph #5 has been withdrawn due to Applicant's amendment in Paper #12.
2. The 35 U.S.C. 103 rejection of claims 15 and 16 of record in Paper #10, Pages 3 – 5, Paragraph #7 has been withdrawn due to Applicant's arguments in Paper #12.

Repeated Rejections

3. The double patenting rejection is repeated for the reasons previously of record in Paper #7, Page 2, Paragraph 2.

Claims 1 – 7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 4 of copending Application No. 09/857,181. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications disclose the same invention in the claims the difference being that one of the applications goes into greater detail in the claims concerning the claimed invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1772

4. The 35 U.S.C. 103 rejection of claims 8 – 10, 13 and 14 over Kratel et al. in view of Sklarski et al. is repeated for the reasons previously of record in Paper #10, Pages 3 – 5, Paragraph #7.

Kratel et al. discloses a microporous heat insulating board with a thickness between 10 to 15 mm (Column 3, lines 14 – 16) that contains 30 to 100% by weight of finely divided metal oxide, 0 to 50% by weight of an opacifier, 0 to 15% of an organic binder and 0 to 50% by weight of a fibrous material (Column 4, claim 1). However, Kratel et al. fails to disclose at least one or both sides of the core having a cover of a heat-resistant material, characterized in that the cover are the same or different and at least one side consists of prefabricated mica sheets, the cover consists of a prefabricated mica sheet on both sides, the cover is adhered to the core and the cover and the core are heat sealed within a sheet.

Sklarski et al. teaches binder being impregnated in a mica paper or papers (Column 1, lines 47 – 52) before placed under heat and pressure (Column 6, lines 33 – 35) in a laminate for the purpose of forming a insulating structure with excellent flexibility, higher moisture resistance and more strength that can be used as supporting insulation for high temperature thermostats, control devices, strip heaters and baseboard heaters.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a layer of mica sheets as cover sheets in Kratel et al. in order to forming a insulating structure with excellent flexibility, higher moisture resistance and

Art Unit: 1772

more strength that can be used as supporting insulation for high temperature thermostats, control devices, strip heaters and baseboard heaters as taught by Sklarski.

Kratel et al. ('689) discloses the claimed invention except for the thickness range of the core. However, Kratel et al. teaches a thickness of 10 to 15 mm, thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the change the thickness of the core depending upon the end use of each product, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

5. The 35 U.S.C. 103 rejection of claims 11 and 12 over Kratel et al. in view of Sklarski et al. and Takahashi et al. is repeated for the reasons previously of record in Paper #10, Page 5, Paragraph #8.

Kratel et al., as modified with Sklarski et al., discloses the claimed invention above except for the heat insulation body being characterized in that it contains from 2 to 45% or 5 to 15% by weight of xonotlite.

Takahashi et al. teaches 2 to 60% (Column 7, lines 30 – 34) of xonotlite (Column 21, lines 59 – 61), 21 to 70% of an inactive substance (Column 5, lines 53 – 55) which includes metal oxides (Column 5, lines 31 – 40) and other additives such as fibers and binders (Column 7,

Art Unit: 1772

lines 51 – 53) in an insulation board for the purpose of forming a board that is light weight, has excellent insulating properties over a wide range of temperatures and has high fire resistance.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the xonotlite as a component in Kratel et al. in order to form a board that is light weight, has excellent insulating properties over a wide range of temperatures and has high fire resistance as taught by Takahashi et al.

New Rejections

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kratel et al. in view of Sklarski et al. as applied to claims 8 – 10, 13 and 14 above, and further in view of Briers (USPN 4,381,327).

Kratel et al., as modified with Sklarski et al., discloses the claimed invention above except for the cover is adhered to the core.

Art Unit: 1772

Briers teaches a sheet of mica (Figure 3, #21) coated with an adhesive (Column 4, lines 47 – 49) before applying metal foil to the surface and adhering them with the help of pressure (Column 5, lines 1 – 5) in a laminate with an insulating layer for the purpose of resisting delamination of the materials due to moisture and erosion.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the mica adhered to the core material of the insulating body in the modified Kratel et al. in order to resist delamination of the materials due to moisture and erosion.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kratel et al. in view of Sklarski et al. as applied to claims 8 – 10, 13 and 14 above, and further in view of Nishimoto (USPN 5,989,371).

Kratel et al., as modified with Sklarski et al., discloses the claimed invention above except for core and the cover being heat-sealed within a sheet.

Nishimoto teaches heat-sealing the core material (Column 9, lines 39 – 47) with mica on the outer edge of the core (Figures 1 and 3, #5) in a insulating board (Column 1, line 6) for the purpose of reducing the amount of heat radiation through the insulation with only a thickness of 20mm or less.

Art Unit: 1772

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the heat-sealed core of an insulating board in the modified Kratel et al. in order to reduce the amount of heat radiation through the insulation with only a thickness of 20mm or less.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kratel et al. in view of Sklarski et al. as applied to claim 8 – 10, 13 and 14 above, and further in view of Kojima et al. (USPN 5,741,608).

Kratel et al., as modified with Sklarski et al., discloses the claimed invention above except for the microporous body being stable at 620 °C.

Kojima et al. teaches heat resistant porous film layers (Column 9, lines 19 – 20) exhibiting resistance to temperatures of at least 600 °C (Column 9, lines 22 – 23) for the purpose of prevention decomposition of the materials when heat is applied to the formed article.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the heat resistant material with temperatures of at least 600 °C in the modified Kratel et al. in order to prevent decomposition of the materials when heat is applied to the formed article.

Response to Arguments

10. Applicant's arguments filed in Paper #12 regarding the 35 U.S.C. 103 rejection of claims 8 – 10, 13 and 14 over Kratel et al. in view of Sklarski et al. have been fully considered but they are not persuasive.

In response to Applicant's argument that Sklarski does not include certain features of the Applicant's invention, the limitations on which the Applicant relies (i.e. containing only inorganic material mixed within the mica and the temperature will not function within the range of the invention) are not stated in the claims. It is the claims that define the invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ 2d 1064.

In response to Applicant's argument that the rejection of claim 14 is improper, it would be obvious to one of ordinary skill in the art at the time of the invention to change the thickness of the core since the general conditions are disclosed in the reference absent of unforeseen results. If unforeseen results are found by the change in thickness, these results are need to be presented by the applicant.

11. Applicant's arguments with respect to claims 15 and 16 in Paper #10 have been considered but are moot in view of the new grounds of rejection.

Art Unit: 1772

12. Applicant's arguments filed in Paper #12 regarding the 35 U.S.C. 103 rejection of claims 11 and 12 over Kratel et al. in view of Sklarski et al. and Takahashi et al. have been fully considered but they are not persuasive.

In response to Applicant's argument that Takahashi includes preparing the mixture in an aqueous medium which results in the product having cracks, Applicant misinterprets the principle that claims are interpreted in the light of the specification. Although these elements (the aqueous medium and the presence of cracks) are found as examples or embodiments in the specification, they were not claimed explicitly. Nor were the words that are used in the claims defined in the specification to require these limitations. A reading of the specification provides no evidence to indicate that these limitation must be imported into the claims to give meaning to disputed terms. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ 2d 1064.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.


Art Unit: 1772

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
pln

November 21, 2002


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/25/02